### WETLAND DETERMINATION DATA FORM – Great Plains Region

Project/Site:Applicant/Owner:	DOE 7				State:	o s	ampling	Point:	6-51
Investigator(s):	N-1c-		Section To	wnehin Re	ange: TIS	e Dali	ور المراسي	, U.I.C	
Landform (hillslope, terrace, etc.):									
Subregion (LRR):									
Soil Map Unit Name:									<u> </u>
Are climatic / hydrologic conditions			-	•					
Are Vegetation, Soil	_, or Hydrology	significantly of	disturbed?	Are	"Normal Circumsta	ances" pre	sent? Y	'es	No_
Are Vegetation, Soil	_, or Hydrology	naturally prob	olematic?	(If n	eeded, explain any	answers	in Rema	rks.)	
SUMMARY OF FINDINGS	- Attach site map	showing	samplin	g point l	ocations, tran	sects, i	mport	ant fea	ıtures,
	ı								
Hydrophytic Vegetation Present?		No	ls th	e Sample	d Area				
Hydric Soil Present? Wetland Hydrology Present?	Yes X		with	in a Wetla	nd? Ye	esX_	No_		
Remarks:	162	NO							
mitigation are	Yes X I	mal cir	cum ster	men.	Stream	realig	nmen	T of	ス
GSIO Flume repl									
0.000									
VEGETATION - Use scien	tific names of plai	nts.							
		Absolute			Dominance Tes	st worksh	eet:		
Tree Stratum (Plot size:		% Cover			Number of Dom	inant Spec	ies		
1					That Are OBL, F (excluding FAC-		FAC	2	· (.
2					-	·	_		(
3					Total Number of Species Across			Z	(E
4					-		-		/-
Sapling/Shrub Stratum (Plot size	: Welland )	=	= Total Cov	ei	Percent of Dom That Are OBL, F	inant Spec	ies AC:	100	> (A
1.		_20_	<u> </u>	FACW				<u> </u>	(/
2	•				Prevalence Ind				
3					Total % Co				
4					OBL species				
5		·			FACW species				
		20.0 =	Total Cov	er	FAC species				
Herb Stratum (Plot size: しめ	Pand )	35	پ	EAZ.	FACU species				
1				OBL					
2				FACU	Column Totals:	• • • • • • • • • • • • • • • • • • • •	(A)		
3				OBL	Prevalence	e Index =	B/A = _	·····	
5.		41	<del></del>	FAC	Hydrophytic Ve	getation	ndicato	rs:	***************************************
6	BRJAI	- <del></del> -		FACU	1 - Rapid Te	est for Hyd	rophytic	Vegetati	ion
7				OBL	2 - Dominar				
8.	•	812/189		FACW	3 - Prevaler	ice Index i	s ≤3.0 <sup>1</sup>		
9.		<u> </u>		FACW	4 - Morphole	ogical Ada	ptations	Provid	e suppor
10.	Δ	41		FALW		lemarks or		•	•
	. ,	41,50 =			Problemation	rıyaropny	uc vege	tation' (E	=xpiain)
Woody Vine Stratum (Plot size:	)	6.50	page 2		<sup>1</sup> Indicators of hy				
1		42.00			be present, unle	ss alsturbe	a or pro	piematic	
2		<del></del> -			Hydrophytic				
	x8121/19 - a	=	Total Cov	er	Vegetation Present?	Yes	γ	No	
0/ Boro Cround in Hart Charle	\ LI II								
% Bare Ground in Herb Stratum					I		<del>/-</del>		
% Bare Ground in Herb Stratum≤ Remarks: ∠ ( = 0,25 %	55%	uda TR	lua.	1000	<u></u>		<del></del>		

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)  Doph Maritx Redox Features (Inches) Color (molst) Color (plantation of Problematic (plantation of Problematic (plantation of Problematic (plantation of Clark (plantation of Molecules (plantation of Clark (plantation of Molecules				
Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)  Depth Matrix Redox Features  (Inches) Color (mols) S Color (mols) S Texture Remarks  Texture Remarks  Texture Remarks  Texture Remarks  Texture Remarks  Texture Remarks  Toxic Remarks  Toxi				
Reduced Features   Remarks   Reduced Matrix   Reduced M	SOIL			Sampling Point: <u>GS10 - A</u>
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.   *Location: PL=Pore Lining, M=Matrix, Pydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)   Indicators for Problematic Hydric Soils*:   Histosoi (A1)   Sandy Gleyed Matrix (S4)   Indicators for Problematic Hydric Soils*:   1 cm Muck (A6) (LRR F, G, H)   Usard Muck (A6) (LRR F, G, H)   Depleted Bolow Dark Surface (A12)   Depleted Matrix (C2)   LRR G, H)   Depleted Bolow Dark Surface (A11)   Redox Dark Surface (F6)   Red Parent Material (TF2)   Very Shallow Dark Surface (A12)   Depleted Dark Surface (A12)   Depleted Dark Surface (A13)   Red Very Color (A14)   Redox Depressions (F8)   Red Very Color (A14)   Redox Co	Profile Description: (Describe to the dept	h needed to document the indicator or confi	rm the absence of inc	dicators.)
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coaled Sand Grains.    Supplication		Redox Features	_	
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)  Histosol (A1)  Histosol (A2)  Black Histic (A3)  Stripped Matrix (S6)  Black Histic (A3)  Stripped Matrix (S6)  Hydrogen Sulfide (A4)  Hydrogen Sulfide (A4)  Loamy Mucky Mineral (F1)  Loamy Mucky Mineral (F1)  Loamy Mucky Mineral (F1)  Loamy Gleyde Matrix (S6)  Hydrogen Sulfide (A4)  Hydrogen Sulfide (A4)  Loamy Mucky Mineral (F1)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A11)  Pedpeted Dark Surface (F1)  Sandy Mucky Mineral (S1)  Some Mucky Peat or Peat (S2) (LRR G, H)  Some Mucky Peat or Peat (S3) (LRR F, G, H)  Bepth (inches):  Wetstrictive Layer (if present):  Type:  Depth (inches):  Working Mydrology Indicators:  Polymary Indicators (minimum of one required: check all that apply)  Secondary Indicators (minimum of one required: check all that apply)  Surface Water (A1)  Hydrogen Sulfide Odor (C1)  Poly-Season Water Table (A2)  Aquatic Invertebrates (B13)  X Saturation (A3)  Hydrogen Sulfide Odor (C1)  Drainage Patterns (B10)  Sediment Deposits (B2)  Drift Deposits (B3)  (where not tilled)  Crayfish Burrows (C8)  Saturation (Visible on Aerial Imagery (B7)  Other (Explain in Remarks)  FAC-Neutral Test (D5)	(inches) Color (moist) %	Color (moist) % Type' Loc <sup>2</sup>	Texture	Remarks
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)  Histosol (A1)  Histosol (A2)  Black Histic (A3)  Stripped Matrix (S6)  Black Histic (A3)  Stripped Matrix (S6)  Hydrogen Sulfide (A4)  Hydrogen Sulfide (A4)  Loamy Mucky Mineral (F1)  Loamy Mucky Mineral (F1)  Loamy Mucky Mineral (F1)  Loamy Gleyde Matrix (S6)  Hydrogen Sulfide (A4)  Hydrogen Sulfide (A4)  Loamy Mucky Mineral (F1)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A11)  Pedpeted Dark Surface (F1)  Sandy Mucky Mineral (S1)  Some Mucky Peat or Peat (S2) (LRR G, H)  Some Mucky Peat or Peat (S3) (LRR F, G, H)  Bepth (inches):  Wetstrictive Layer (if present):  Type:  Depth (inches):  Working Mydrology Indicators:  Polymary Indicators (minimum of one required: check all that apply)  Secondary Indicators (minimum of one required: check all that apply)  Surface Water (A1)  Hydrogen Sulfide Odor (C1)  Poly-Season Water Table (A2)  Aquatic Invertebrates (B13)  X Saturation (A3)  Hydrogen Sulfide Odor (C1)  Drainage Patterns (B10)  Sediment Deposits (B2)  Drift Deposits (B3)  (where not tilled)  Crayfish Burrows (C8)  Saturation (Visible on Aerial Imagery (B7)  Other (Explain in Remarks)  FAC-Neutral Test (D5)		, , , , , , , , , , , , , , , , , , , ,		
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)  Histosol (A1)  Histosol (A2)  Black Histic (A3)  Stripped Matrix (S6)  Black Histic (A3)  Stripped Matrix (S6)  Hydrogen Sulfide (A4)  Hydrogen Sulfide (A4)  Loamy Mucky Mineral (F1)  Loamy Mucky Mineral (F1)  Loamy Mucky Mineral (F1)  Loamy Gleyde Matrix (S6)  Hydrogen Sulfide (A4)  Hydrogen Sulfide (A4)  Loamy Mucky Mineral (F1)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A11)  Pedpeted Dark Surface (F1)  Sandy Mucky Mineral (S1)  Some Mucky Peat or Peat (S2) (LRR G, H)  Some Mucky Peat or Peat (S3) (LRR F, G, H)  Bepth (inches):  Wetstrictive Layer (if present):  Type:  Depth (inches):  Working Mydrology Indicators:  Polymary Indicators (minimum of one required: check all that apply)  Secondary Indicators (minimum of one required: check all that apply)  Surface Water (A1)  Hydrogen Sulfide Odor (C1)  Poly-Season Water Table (A2)  Aquatic Invertebrates (B13)  X Saturation (A3)  Hydrogen Sulfide Odor (C1)  Drainage Patterns (B10)  Sediment Deposits (B2)  Drift Deposits (B3)  (where not tilled)  Crayfish Burrows (C8)  Saturation (Visible on Aerial Imagery (B7)  Other (Explain in Remarks)  FAC-Neutral Test (D5)				
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)  Histosol (A1)  Histosol (A2)  Black Histic (A3)  Stripped Matrix (S6)  Black Histic (A3)  Stripped Matrix (S6)  Black Histic (A3)  Hydrogen Sulfide (A4)  Hydrogen Sulfide (A4)  Hydrogen Sulfide (A4)  Loamy Mucky Mineral (F1)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A11)  Pedpeted Dark Surface (F6)  Sandy Gleyed Matrix (F3)  Reduced Vertic (F18)  Red Parent Material (TF2)  Sondy Mucky Mineral (S1)  Sondy Mucky Mineral (S1)  Sond Mucky Peat or Peat (S2) (LRR G, H)  Sond Mucky Peat or Peat (S3) (LRR F)  Wethand Hydrology must be present, unless disturbed or problematic.  Restrictive Layer (if present):  Type:  Depth (inches):  Wethand Hydrology Indicators:  Polymary Indicators (minimum of one required: check all that apply)  Secondary Indicators (minimum of one required: check all that apply)  YOROLOGY  Water Marks (B1)  Surface Water (A1)  Sall Crust (B11)  Surface (F6)  Hydric Soil Present? Yes  No  Secondary Indicators (minimum of two required)  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  Yester Marks (B1)  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  Yester Marks (B1)  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  Yester Marks (B1)  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  Yester Marks (B1)  Presence of Reduced Iron (C4)  Hydrogen Sulfide Odor (C1)  Drift Deposits (B3)  Where not tilled)  Craylish Burrows (C8)  Hydrogen Sulfide Cof7  Hydrog				
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)  Histosol (A1)  Histosol (A2)  Black Histic (A3)  Stripped Matrix (S6)  Black Histic (A3)  Stripped Matrix (S6)  Hydrogen Sulfide (A4)  Hydrogen Sulfide (A4)  Loamy Mucky Mineral (F1)  Loamy Mucky Mineral (F1)  Loamy Mucky Mineral (F1)  Loamy Micky Mineral (F1)  Loamy Mucky Mineral (F1)  Loamy Gleyd Matrix (F3)  Reduced Vertic (F18)  Red Parent Material (TF2)  Very Shallow Dark Surface (TF12)  Vother (Explain in Remarks)  And Wetland hydrology must be present, unless disturbed or problematic.  Restrictive Layer (if present):  Type:  Depth (inches):  Hydric Soil Present? Yes No  Remarks:  And Water Marks (M1)  Yes Advantage (F1)  Secondary Indicators (minimum of one required: check all that apply)  Secondary Indicators (minimum of one required: check all that apply)  Yorkology  Yo				
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)  Histosol (A1)  Histosol (A2)  Black Histic (A3)  Stripped Matrix (S6)  Black Histic (A3)  Stripped Matrix (S6)  Hydrogen Sulfide (A4)  Hydrogen Sulfide (A4)  Loamy Mucky Mineral (F1)  Loamy Mucky Mineral (F1)  Loamy Mucky Mineral (F1)  Loamy Micky Mineral (F1)  Loamy Mucky Mineral (F1)  Loamy Gleyd Matrix (F3)  Reduced Vertic (F18)  Red Parent Material (TF2)  Very Shallow Dark Surface (TF12)  Vother (Explain in Remarks)  And Wetland hydrology must be present, unless disturbed or problematic.  Restrictive Layer (if present):  Type:  Depth (inches):  Hydric Soil Present? Yes No  Remarks:  And Water Marks (M1)  Yes Advantage (F1)  Secondary Indicators (minimum of one required: check all that apply)  Secondary Indicators (minimum of one required: check all that apply)  Yorkology  Yo			,	
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)  Histosol (A1)  Histosol (A2)  Black Histic (A3)  Stripped Matrix (S6)  Black Histic (A3)  Stripped Matrix (S6)  Black Histic (A3)  Hydrogen Sulfide (A4)  Hydrogen Sulfide (A4)  Hydrogen Sulfide (A4)  Loamy Mucky Mineral (F1)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A11)  Pedpeted Dark Surface (F6)  Sandy Gleyed Matrix (F3)  Reduced Vertic (F18)  Red Parent Material (TF2)  Sondy Mucky Mineral (S1)  Sondy Mucky Mineral (S1)  Sond Mucky Peat or Peat (S2) (LRR G, H)  Sond Mucky Peat or Peat (S3) (LRR F)  Wethand Hydrology must be present, unless disturbed or problematic.  Restrictive Layer (if present):  Type:  Depth (inches):  Wethand Hydrology Indicators:  Polymary Indicators (minimum of one required: check all that apply)  Secondary Indicators (minimum of one required: check all that apply)  YOROLOGY  Water Marks (B1)  Surface Water (A1)  Sall Crust (B11)  Surface (F6)  Hydric Soil Present? Yes  No  Secondary Indicators (minimum of two required)  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  Yester Marks (B1)  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  Yester Marks (B1)  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  Yester Marks (B1)  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  Yester Marks (B1)  Presence of Reduced Iron (C4)  Hydrogen Sulfide Odor (C1)  Drift Deposits (B3)  Where not tilled)  Craylish Burrows (C8)  Hydrogen Sulfide Cof7  Hydrog				
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)  Histosol (A1)  Histosol (A2)  Black Histic (A3)  Stripped Matrix (S6)  Black Histic (A3)  Stripped Matrix (S6)  Black Histic (A3)  Hydrogen Sulfide (A4)  Hydrogen Sulfide (A4)  Hydrogen Sulfide (A4)  Loamy Mucky Mineral (F1)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A11)  Pedpeted Dark Surface (F6)  Sandy Gleyed Matrix (F3)  Reduced Vertic (F18)  Red Parent Material (TF2)  Sondy Mucky Mineral (S1)  Sondy Mucky Mineral (S1)  Sond Mucky Peat or Peat (S2) (LRR G, H)  Sond Mucky Peat or Peat (S3) (LRR F)  Wethand Hydrology must be present, unless disturbed or problematic.  Restrictive Layer (if present):  Type:  Depth (inches):  Wethand Hydrology Indicators:  Polymary Indicators (minimum of one required: check all that apply)  Secondary Indicators (minimum of one required: check all that apply)  YOROLOGY  Water Marks (B1)  Surface Water (A1)  Sall Crust (B11)  Surface (F6)  Hydric Soil Present? Yes  No  Secondary Indicators (minimum of two required)  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  Yester Marks (B1)  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  Yester Marks (B1)  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  Yester Marks (B1)  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  Yester Marks (B1)  Presence of Reduced Iron (C4)  Hydrogen Sulfide Odor (C1)  Drift Deposits (B3)  Where not tilled)  Craylish Burrows (C8)  Hydrogen Sulfide Cof7  Hydrog				
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)  Histosol (A1)  Histosol (A2)  Black Histic (A3)  Stripped Matrix (S6)  Black Histic (A3)  Stripped Matrix (S6)  Hydrogen Sulfide (A4)  Hydrogen Sulfide (A4)  Loamy Mucky Mineral (F1)  Loamy Mucky Mineral (F1)  Loamy Mucky Mineral (F1)  Loamy Micky Mineral (F1)  Loamy Mucky Mineral (F1)  Loamy Gleyd Matrix (F3)  Reduced Vertic (F18)  Red Parent Material (TF2)  Very Shallow Dark Surface (TF12)  Vother (Explain in Remarks)  And Wetland hydrology must be present, unless disturbed or problematic.  Restrictive Layer (if present):  Type:  Depth (inches):  Hydric Soil Present? Yes No  Remarks:  And Water Marks (M1)  Yes Advantage (F1)  Secondary Indicators (minimum of one required: check all that apply)  Secondary Indicators (minimum of one required: check all that apply)  Yorkology  Yo	· · · · · · · · · · · · · · · · · · ·			·
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)  Histosol (A1)  Histosol (A2)  Black Histic (A3)  Stripped Matrix (S6)  Black Histic (A3)  Stripped Matrix (S6)  Hydrogen Sulfide (A4)  Hydrogen Sulfide (A4)  Loamy Mucky Mineral (F1)  Loamy Mucky Mineral (F1)  Loamy Mucky Mineral (F1)  Loamy Micky Mineral (F1)  Loamy Mucky Mineral (F1)  Loamy Gleyd Matrix (F3)  Reduced Vertic (F18)  Red Parent Material (TF2)  Very Shallow Dark Surface (TF12)  Vother (Explain in Remarks)  And Wetland hydrology must be present, unless disturbed or problematic.  Restrictive Layer (if present):  Type:  Depth (inches):  Hydric Soil Present? Yes No  Remarks:  And Water Marks (M1)  Yes Advantage (F1)  Secondary Indicators (minimum of one required: check all that apply)  Secondary Indicators (minimum of one required: check all that apply)  Yorkology  Yo				
Histosol (A1) Sandy Gleyed Matrix (S4) 1 cm Muck (A9) (LRR I, J) Histic Epipedon (A2) Sandy Redox (S5) Coast Prairie Redox (A16) (LRR F, G, H) Black Histic (A3) Stripped Matrix (S6) Dark Surface (S7) (LRR G) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) High Plains Depressions (F16) (LRR H) High Plains Depressions (F16) (LRR H) Loamy Gleyed Matrix (F2) (LRR G) High Plains Depressions (F16)  Ich Muck (A9) (LRR F, G, H) Depleted Matrix (F2) (LRR G) High Plains Depressions (F16)  Ich Muck (A9) (LRR F, G, H) Depleted Matrix (F2) (LRR G, H) High Plains Depressions (F16) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Red Parent Material (TF2) Sandy Mucky Mineral (S1) Redox Depressions (F16) Redox Depressions (F16)  Ich Mucky Peat or Peat (S2) (LRR G, H) High Plains Depressions (F16) MILRA 72 & 73 of LRR H)  Setrictive Layer (If present):  Type: Depth (inches): Hydrogen Sulface (F6) (RIR G) Hydrogen Sulface (F7)  YOROLOGY  Vertland Hydrology Indicators:  Yor Sall Crust (B11) Secondary Indicators (minimum of one required; check all that apply)  X Surface Water (A1) Surface (T1) Secondary Indicators (minimum of two required)  X Surface Water (A1) Surface (B8)  X Saturation (A3) Hydrogen Sulfide Odor (C1) Drainage Patterns (B10)  Water Marks (B1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living Roots (C3)  Water Marks (B1) Deposits (B2) Oxidized Rhizospheres on Living Roots (C3)  Capter Marks (B4) Presence of Reduced Iron (C4) Saturation (Visible on Aerial Imagery (C9)  Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)  Loamy Mucky Mineral (F1) Loamy Mucky Mineral (F1)  Loamy Mucky Mineral (F1) Loamy Mucky Mineral (F1)  Loamy Mucky Mineral (F1)  Loamy Mucky Mineral (F1)  Loamy Mucky Mineral (F1)  Loamy Mucky Mineral (F1)  Loamy Mucky Mineral (F1)  Loamy Mucky Mineral (F1)  Loamy Mucky Mineral (F1)  Loamy Mucky Mineral (F1)  Loamy Mucky Mineral (F1)  Loamy Mucky Mineral (F1)  Loamy Mucky Mineral (F1)  Loamy Mucky Mineral (F1)  Loamy Mucky Mineral (F1)  Loamy Mucky Mineral (F1)  Lo				
Histic Epipedon (A2) Sandy Redox (S5) Coast Prairie Redox (A16) (LRR F, G, H) Black Histic (A3) Stripped Matrix (S6) Dark Surface (S7) (LRR G) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) High Plains Depressions (F16)  Stratified Layers (A5) (LRR F) Loamy Gleyed Matrix (F2) (LRR H outside of MLRA 72 & 73)  1 or Muck (A9) (LRR F, G, H) Depleted Matrix (F3) Reduced Vertic (F18) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Red Parent Material (TF2) Thick Dark Surface (A12) Depleted Dark Surface (F7) Redox Depressions (F8)  1 or Mucky Peat or Peat (S2) (LRR G, H) High Plains Depressions (F8) To m Mucky Peat or Peat (S2) (LRR G, H) Som Mucky Peat or Peat (S2) (LRR G, H) Som Mucky Peat or Peat (S3) (LRR F)  Restrictive Layer (if present):  Type: Depth (inches):  Depth (inches):  No Semarks:  The stripped Matrix (F2) Hydrogen Surface (F7) Redox Depressions (F8)  Hydric Soil Present? Yes No  Remarks:  Semarks:  Semarks:  Semarks:  Semarks:  Surface Water (A1) Salt Crust (B11) High Plains Depressions (F16) Red Parent Material (TF2) Very Shallow Dark Surface (T16) Reduced Vertic (F18) Reduced Vertic		•		-
Black Histic (A3) Stripped Matrix (S6) Dark Surface (S7) (LRR G) Hydrogen Sulfide (A4) Loarny Mucky Mineral (F1) Loarny Mucky Mineral (F1) (LRR H outside of MLRA 72 & 73)  1 cm Muck (A9) (LRR F, G, H) Depleted Matrix (F3) Redox Dark Surface (F6) Reduced Vertic (F18) Depleted Below Dark Surface (A11) Redox Dark Surface (F7) Redox Dark Surface (F7) Redox Dark Surface (F7) Very Shallow Dark Surface (F7)		, , ,		
Hydrogen Sulfide (A4)	<del> </del>	<del></del>		
1 cm Muck (A9) (LRR F, G, H)	<del></del>			
Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Red Parent Material (TF2) Thick Dark Surface (A12) Depleted Dark Surface (F7) Very Shallow Dark Surface (TF12) Sandy Mucky Mineral (S1) Redox Depressions (F8) Other (Explain in Remarks)  2.5 cm Mucky Peat or Peat (S2) (LRR G, H) High Plains Depressions (F16) 5 cm Mucky Peat or Peat (S3) (LRR F) (MLRA 72 & 73 of LRR H) Wetland hydrology must be present, unless disturbed or problematic.  Restrictive Layer (if present):  Type:  Depth (inches):  Type:  Depth (inches):  No Sell Present? Yes No  Remarks:  Area work Hydrology must be present, unless disturbed or problematic.  Restrictive Layer (if present):  Type:  Depth (inches):  Type:  Depth (inches):  Depth (inches):  Depth (inches):  Depth (inches):  The developing Hydric Soil Present? Yes No  Remarks:  Area work Hydrology must be present, unless disturbed or problematic.  Restrictive Layer (if present):  Type:  Depth (inches):  The developing Hydric Soil Present? Yes No  Remarks:  Area work Hydrology must be present, unless disturbed or problematic.  Restrictive Layer (if present):  Type:  Depth (inches):  The developing Hydric Soil Present? Yes No  Remarks:  Area work Hydrology must be present, unless disturbed or problematic.  Restrictive Layer (if present):  Type:  Depth (inches):  Type:  Depth (inches):  The developing Hydric Soil Present? Yes No  Remarks:  Area work Hydrology must be present, unless disturbed or problematic.  Restrictive Layer (if present):  Type:  Depth (inches):  Type:  Depth (inches):  The developing Hydric Soil Present?  Yes No  Remarks:  Area work (Explain in Remarks)  Secondary Indicators (minimum of two required)  Secondary Indicators (minimum of		Loamy Gleyed Matrix (F2)	(LRR H o	utside of MLRA 72 & 73)
Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Second Mucky Peat or Peat (S2) (LRR G, H) Some Mucky Peat or Peat (S2) (LRR F) Setrictive Layer (if present):  Type: Depth (inches): Setrictive Layer (if present):  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  No Setrictive Layer (if present):  No Setrictive Layer (if present):  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  No Setrictive Layer (if present):  No Setrictive Layer (if p		, , ,	_	` '
Sandy Mucky Mineral (S1)			********	, ,
2.5 cm Mucky Peat or Peat (S2) (LRR G, H) High Plains Depressions (F16) wetland hydrology must be present, unless disturbed or problematic.  Restrictive Layer (if present):  Type:				
wetland hydrology must be present, unless disturbed or problematic.    Restrictive Layer (if present):				*
Type:	5 cm Mucky Peat or Peat (S3) (LRR F)		wetland hydr	ology must be present,
Depth (inches):	Restrictive Layer (if present):			
Remarks:  Interim menitoring of scilipits due to the developing.  YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  X Surface Water (A1)  X High Water Table (A2)  X Saturation (A3)  Water Marks (B1)  Dry-Season Water Table (C2)  Sediment Deposits (B2)  Drift Deposits (B3)  X Algal Mat or Crust (B4)  Iron Deposits (B5)  Inundation Visible on Aerial Imagery (B7)  O Selictrophic Volume To does not present to developing.  Area well Indicators (minimum of one required to developing)  Area well Indicators (winders days during the developing of the continuation of two required)  Secondary Indicators (minimum of two required)  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  Sparsely Vegetated Concave Surface (B1)  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B1)  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surf	Type:	-		
Triter. In Monitoria No Scilpits dug. Area well and the Continue and Solition of the Continue and Solition of the Continue and the Continue an	Depth (inches):	Annual Property of the Control of th	Hydric Soil Prese	ent? Yes No
YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  ★ Surface Water (A1)  ★ High Water Table (A2)  ★ Saturation (A3)  Water Marks (B1)  Secondary Indicators (minimum of two required)  ★ Surface Soil Cracks (B6)  Aquatic Invertebrates (B13)  Fydrogen Sulfide Odor (C1)  Water Marks (B1)  Secondary Indicators (minimum of two required)  Secondary Indicators (minimum of two required)  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  Fydrogen Sulfide Odor (C1)  Drainage Patterns (B10)  Oxidized Rhizospheres on Living Roots (C3)  (where tilled)  Crayfish Burrows (C8)  Algal Mat or Crust (B4)  Presence of Reduced Iron (C4)  Iron Deposits (B5)  Thin Muck Surface (C7)  Inundation Visible on Aerial Imagery (B7)  Other (Explain in Remarks)  FAC-Neutral Test (D5)	Remarks:		41< R. ()	Continents dans durin
YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  ★ Surface Water (A1)  ★ High Water Table (A2)  ★ Saturation (A3)  Water Marks (B1)  Secondary Indicators (minimum of two required)  ★ Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  ★ Saturation (A3)  Dry-Season Water Table (C2)  Sediment Deposits (B2)  Drift Deposits (B3)  (where not tilled)  Water Marks (B4)  Presence of Reduced Iron (C4)  Iron Deposits (B5)  Inundation Visible on Aerial Imagery (B7)  Other (Explain in Remarks)  Secondary Indicators (minimum of two required)  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  Where obligation (C1)  Drainage Patterns (B10)  Oxidized Rhizospheres on Living Roots (C3)  (where tilled)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  FAC-Neutral Test (D5)		No sail pits dug.	The Hand h	ydrology as says F
YDROLOGY         Vetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)       Secondary Indicators (minimum of two required)         ★ Surface Water (A1)       Salt Crust (B11)       Surface Soil Cracks (B6)         ★ High Water Table (A2)       Aquatic Invertebrates (B13)       Sparsely Vegetated Concave Surface (B8)         ★ Saturation (A3)       Hydrogen Sulfide Odor (C1)       Drainage Patterns (B10)         Water Marks (B1)       Dry-Season Water Table (C2)       Oxidized Rhizospheres on Living Roots (C3)       (where tilled)         ★ Sediment Deposits (B2)       Oxidized Rhizospheres on Living Roots (C3)       (where tilled)       Crayfish Burrows (C8)         ★ Algal Mat or Crust (B4)       Presence of Reduced Iron (C4)       Saturation Visible on Aerial Imagery (C9)         Iron Deposits (B5)       Thin Muck Surface (C7)       Geomorphic Position (D2)         Inundation Visible on Aerial Imagery (B7)       Other (Explain in Remarks)       FAC-Neutral Test (D5)		- disturbed so. 1. Hydrophytic	T .	3, 22,
Vetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)       Secondary Indicators (minimum of two required)         ★ Surface Water (A1)       Salt Crust (B11)       Surface Soil Cracks (B6)         ★ High Water Table (A2)       Aquatic Invertebrates (B13)       Sparsely Vegetated Concave Surface (B8)         ★ Saturation (A3)       Hydrogen Sulfide Odor (C1)       Drainage Patterns (B10)         Water Marks (B1)       Dry-Season Water Table (C2)       Oxidized Rhizospheres on Living Roots (C3)         Sediment Deposits (B2)       Oxidized Rhizospheres on Living Roots (C3)       (where tilled)         Drift Deposits (B3)       (where not tilled)       Crayfish Burrows (C8)         ★ Algal Mat or Crust (B4)       Presence of Reduced Iron (C4)       Saturation Visible on Aerial Imagery (C9)         Iron Deposits (B5)       Thin Muck Surface (C7)       Geomorphic Position (D2)         Inundation Visible on Aerial Imagery (B7)       Other (Explain in Remarks)       FAC-Neutral Test (D5)	, ()	summer a se accounting.		
Primary Indicators (minimum of one required; check all that apply)  Secondary Indicators (minimum of two required)  Surface Water (A1)  High Water Table (A2)  Aquatic Invertebrates (B13)  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  Hydrogen Sulfide Odor (C1)  Drainage Patterns (B10)  Oxidized Rhizospheres on Living Roots (C3)  Sediment Deposits (B2)  Drift Deposits (B3)  (where not tilled)  Presence of Reduced Iron (C4)  Iron Deposits (B5)  Inundation Visible on Aerial Imagery (B7)  Other (Explain in Remarks)  Secondary Indicators (minimum of two required)  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  Drainage Patterns (B10)  Oxidized Rhizospheres on Living Roots (C3)  (where tilled)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  FAC-Neutral Test (D5)				
<ul> <li>✓ Surface Water (A1)</li> <li>✓ Sult Crust (B11)</li> <li>✓ Surface Soil Cracks (B6)</li> <li>✓ High Water Table (A2)</li> <li>✓ Aquatic Invertebrates (B13)</li> <li>✓ Sparsely Vegetated Concave Surface (B8)</li> <li>✓ Saturation (A3)</li> <li>✓ Hydrogen Sulfide Odor (C1)</li> <li>✓ Drainage Patterns (B10)</li> <li>✓ Oxidized Rhizospheres on Living Roots (C3)</li> <li>✓ Sediment Deposits (B2)</li> <li>✓ Oxidized Rhizospheres on Living Roots (C3)</li> <li>✓ (where tilled)</li> <li>✓ Crayfish Burrows (C8)</li> <li>✓ Algal Mat or Crust (B4)</li> <li>✓ Presence of Reduced Iron (C4)</li> <li>✓ Saturation Visible on Aerial Imagery (C9)</li> <li>✓ Iron Deposits (B5)</li> <li>✓ Inundation Visible on Aerial Imagery (B7)</li> <li>✓ Other (Explain in Remarks)</li> <li>✓ FAC-Neutral Test (D5)</li> </ul>	• • •	check all that apply)	Secondary Ind	icators (minimum of two required)
<ul> <li>★ High Water Table (A2)</li> <li>★ Saturation (A3)</li> <li>★ Water Marks (B1)</li> <li>★ Sediment Deposits (B2)</li> <li>★ Drift Deposits (B3)</li> <li>★ Algal Mat or Crust (B4)</li> <li>★ In Muck Surface (C7)</li> <li>★ In Muck Surface (C7)</li> <li>★ In Muck Surface (C7)</li> <li>★ Geomorphic Position (D2)</li> <li>★ Geomorphic Position (D2)</li> <li>★ FAC-Neutral Test (D5)</li> </ul>	X Surface Water (A1)	Salt Crust (B11)	-	
<ul> <li>X Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> <li>Iron Deposits (B5)</li> <li>Inundation Visible on Aerial Imagery (B7)</li> <li>Dry-Season Water Table (C2)</li> <li>Oxidized Rhizospheres on Living Roots (C3)</li> <li>(where tilled)</li> <li>Crayfish Burrows (C8)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>FAC-Neutral Test (D5)</li> </ul>	∠ High Water Table (A2)			· · ·
Sediment Deposits (B2) Drift Deposits (B3)  (where not tilled)  (where not tilled) Crayfish Burrows (C8)  Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7)  Oxidized Rhizospheres on Living Roots (C3) (where tilled) Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Ageomorphic Position (D2) FAC-Neutral Test (D5)	∠X Saturation (A3)	Hydrogen Sulfide Odor (C1)		· · ·
Drift Deposits (B3)		Dry-Season Water Table (C2)	Oxidized F	Rhizospheres on Living Roots (C3)
X Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Saturation Visible on Aerial Imagery (C9)  Iron Deposits (B5) Thin Muck Surface (C7) Geomorphic Position (D2)  Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) FAC-Neutral Test (D5)				·
Iron Deposits (B5) Thin Muck Surface (C7) Geomorphic Position (D2) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) FAC-Neutral Test (D5)	, ,	,		` '
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) FAC-Neutral Test (D5)		. ,		
Water-Stained Leaves (B9) Frost-Heave Hummocks (D7) (LRR F)	Inundation visible on Aerial Imagery (B7) Water-Stained Leaves (B9)	Oner (Explain in Remarks)		ve Hummocks (D7) (LRR F)

Depth (inches):	Hydric Soil Present? Yes No
Remarks:  Interim monitoring No soil pits dug.  growing season. Mitigate or -disturbed soil. Hydrophytic  Thayen hydric soils are assumed to be developing.  HYDROLOGY	Area wet >14 Contineous days during , veg Twestand hydrology ore present,
HYDROLOGY	
Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (minimum of two required)
<ul> <li>✓ Surface Water (A1)</li> <li>✓ High Water Table (A2)</li> <li>✓ Aquatic Invertebrates (B13)</li> <li>✓ Saturation (A3)</li> <li>✓ Hydrogen Sulfide Odor (C1)</li> <li>✓ Water Marks (B1)</li> <li>✓ Dry-Season Water Table (C2)</li> <li>✓ Sediment Deposits (B2)</li> <li>✓ Oxidized Rhizospheres on Living R</li> <li>✓ (where not tilled)</li> <li>✓ Algal Mat or Crust (B4)</li> <li>✓ Iron Deposits (B5)</li> <li>✓ Thin Muck Surface (C7)</li> <li>✓ Inundation Visible on Aerial Imagery (B7)</li> <li>✓ Water-Stained Leaves (B9)</li> </ul>	Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Oxidized Rhizospheres on Living Roots (C3) oots (C3)
Field Observations:	
Surface Water Present? Yes X No Depth (inches): O 12"  Water Table Present? Yes X No Depth (inches): O Saturation Present? Yes X No Depth (inches): O (includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspection of the carrier semarks:	<i>''</i>
US Army Corps of Engineers	Great Plains – Version 2.0

# Wetland Determination Data Form - Great Plains Region **Extra Page for Vegetation Species**

Date	8/21/14			
Sampling Point	G510 - A	(103)	- -	
Tree Stratum				
		Absolute	Dominant	Indicator
	Scientific Name	% Cover	Species?	Status
5				
6				
7				
8				
9		1		
10				
	10 min 10		= Total Cov	er

# Sapling/Shrub Stratum

	Scientific Name	Dominant Species?	
6		•	
7			
8			
9			
10			
		 = Total Cov	er

O.S = Total Cover

### **Herb Stratum**

		Scientific Name	Absolute % Cover		
319	11	LASEI	41	T .	FAC
320	12	2Em 11	41		OBL
	13	1			
	14				İ
	15				
	16				
	17				
	18			· · · · · · · · · · · · · · · · · · ·	
	19				
	20			···	•
	21				
	22				
	23				
	24	*			
	25				
	26				
	27				
	28				
	29				
	30				
	31				
	32				
[	33				
	34				
	35				

Over > ?

# Wetland Determination Data Form - Great Plains Region Extra Page for Vegetation Species

Date			
Sampling Point		_	
Tree Stratum		<del></del>	
Scientific Name	Absolute % Cover	Dominant Species?	Indicator Status
11 12			
13			
14			
15			
		= Total Cov	ver
Sapling/Shrub Stratum			
Scientific Name	Absolute % Cover	Dominant Species?	Indicator

	L		
		İ	
ļ			
ı			

= Total Cover

### **Herb Stratum**

	Scientific Name	Absolute % Cover	Dominant Species?	Indicator Status
36				
37				
38				
39				
40		1		
41				
42				
43				
44				
45		<del> </del>		
46				
47				
48		1		
49				
50		1		
51			<del></del>	
52	,	<del> </del>		
53			<del></del>	
54				
55				
56		<del>                                     </del>		
57				
58				
59				
60				
61				

= Total Cover

Wetland Qualitative Reveger	tation Evaluation	Form				Form #_	
Date $8/21/19$ Observer(s) $-10/19$ Location ID $6 \le$	Mels- 10-A (103)						
Photographs taken today?	у (	か た	ihi e	allu.			
Are desired wetland plant spec	ies present?	r (Y	1				
				tland sp	ecies? I	Explain,	if so.
		7.					
Are the hydrologic conditions a wetland. If not, describe the pro-	oblem/issue.	cessful es	stablishn	nent and		ability of	f the
Woody Plant Counts							
Curati	C		Height			Width	
Species SAEXI	Stem Count	5′	6'	3 6'	31	6'	3 7'
	·						

Noxious weed evaluation. See separate noxious weed evaluations conducted throughout the summer months (June - August).

Suggestions for management:

Control weeds as needed.

Other comments:

Wetland vegetatur is beginning to establish. Filling in along stream. SAEXI Stam doing well also along we natural regenerate - James SAEXI patch.

Completed by: Jos K. Nols - Date 8/2/1/19